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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,203	12/20/2001	Takeshi Meguro	10873.855US01	2114

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06/06/2003

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EXAMINER

ESTRADA, ANGEL R

ART UNIT

PAPER NUMBER

2831

DATE MAILED: 06/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

10/028,203

Applicant(s)

MEGURO ET AL.

Examiner

Angel R. Estrada

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 and 3
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meguro et al (US 6,487,878) in view of Horiuchi et al (US 6,132,279).

Regarding claim 1, Meguro et al disclose a method for manufacturing a discharge tube (see figure 2), the discharge tube comprising a discharge part, a sealing part formed at an end of the discharge part (see figure 2), and an electrode (15,17) provided in the discharge part (see figure 2), the method comprising: inserting an electrode body having the electrode into a portion to be the sealing part that is adjacent to a portion to be the discharge part of a transparent insulating tube (column 5 line 20-

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21) serving as a material for the discharge tube; and sealing the portion to be the sealing part by heating and softening with a laser beam thus forming the sealing part (column 5 lines 35-36 and 39-40; and column 6 line 34-36); but Meguro et al lack the step of combining a laser beam and a gas burner to form the sealing part. Horiuchi et al teach a method of sealing and manufacture a discharge lamp (see figure 1a) using burners (300). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add to Meguro et al's method a gas burner as taught by Horiuchi et al to permit substantial reduction in manufacturing time and simplifies the overall manufacturing process.

Regarding claim 2, the modified Meguro et al disclose the method for manufacturing a discharge tube (see figure 2), wherein an end of the portion (11) to be the sealing part on a side of the portion to be the discharge part is sealed by heating and softening with the laser beam (see figure 1), and a portion (13a) other than the end of the portion to be the sealing part on the side of the portion to be the discharge part is sealed by heating and softening with the gas burner (as taught by Horiuchi et al).

Regarding claim 3, the modified Meguro et al discloses the method for manufacturing a discharge tube (see figure 2), wherein, immediately before or after a completion of sealing the end of the portion to be the sealing part on the side of the portion to be the discharge part by heating and softening with the laser beam (see figure 1), a region that is adjacent to the heated and softened region of the portion to be the sealing part starts being heated and softened with the gas burner (as taught by Horiuchi et al).

Regarding claim 4, the modified Meguro et al disclose the method for manufacturing a discharge tube (see figure 2), wherein the portion to be the sealing part is sealed sequentially from an end on a side of the portion to be the discharge part toward an end on an opposite side of the portion to be the discharge part (see figure 2).

Regarding claim 5, the modified Meguro et al disclose the method for manufacturing a discharge tube (see figure 2), wherein the portion to be the sealing part is sealed sequentially from an end on an opposite side of the portion to be the discharge part toward an end on a side of the portion to be the discharge part (see figure 2).

Regarding claim 6, the modified Meguro et al disclose the method for manufacturing a discharge tube (see figure 2), wherein at least a part of a region to be heated and softened with the laser beam (see figure 1) and a part of a region to be heated and softened with the gas burner (as taught by Heider et al) overlap each other in the portion to be the sealing part.

Regarding claim 7, the modified Meguro et al disclose a discharge lamp (well known in the art) comprising a discharge tube (see figure 2) obtained by the method according to claim 1 (the combination of Meguro et al in view of Horiuchi et al).

2. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meguro et al (US 6,487,878) in view of Horiuchi et al (US 6,132,279) as applied in claim 1 and further in view of Nakagawa et al (US 6,285,130).

Regarding claim 8, the modified Meguro et al discloses discharge lamp comprising: a discharge tube (see figure 2) obtained by the method according to claim 1

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(the combination of Meguro et al in view of Horiuchi et al) but lack the lamp having a reflector. Nakagawa et al teach a discharge lamp with a reflector. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide to the modified Meguro et al discharge tube with a reflector as taught by Nakagawa et al to enhance the lamp brightness.

3. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meguro et al (US 6,487,878) in view of Horiuchi et al (US 6,132,279) as applied in claim 1 and further in view of Vollmer (US 6,071,164).

Regarding claim 9, the modified Meguro et al disclose a discharge lamp comprising: a discharge tube (see figure 2) obtained by the method according to claim 1(the combination of Meguro et al in view of Horiuchi et al); but lacks an outer tube surrounding the discharge tube, and a lamp base provided at an end of the outer tube. Vollmer teaches a discharge lamp (see figure 1) comprising a discharge tube (1), an outer tube (5) surrounding the discharge tube (1) and a lamp base (4) provided at an end of the outer tube (1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide to the modified Meguro et al's discharge lamp with an outer tube surrounding the discharge tube and a lamp base provided at an end of the outer tube to protect and to electrically connect the discharge tube to a power supply.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nishibori et al (US 5,984,749), Numajiri et al (US 5,286,227), Lamouri et al (US 6,517,404), Cognolato et al (US 5,411,565) and Horiushi et al (US 6,368,175) disclose a method for manufacturing a discharge tube.

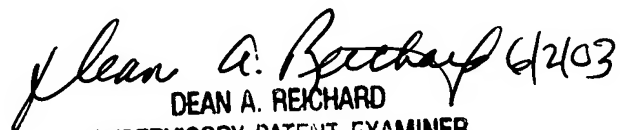
5. Any inquiry concerning this communication should be directed to Angel R. Estrada at telephone number (703) 305-0853. The Examiner can normally be reached on Monday-Friday (8:30 -5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (703) 308-3682. The fax numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for after final communication.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

AE

May 30, 2003


DEAN A. REICHARD
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